

**LISTING OF CLAIMS:**

- 1.(original) A method of treating a lung condition in a primate exhibiting symptoms of cystic fibrosis, said method comprising administering to the respiratory system of said primate an effective amount of H<sub>2</sub>O<sub>2</sub>.
2. (previously amended) The method of claim 1, wherein said administering is by a) inhalation of H<sub>2</sub>O<sub>2</sub> or b) said administering is a formulation which produces H<sub>2</sub>O<sub>2</sub> in said respiratory system.
3. (cancelled) The method of claim 1, wherein said administering is a formulation which produces H<sub>2</sub>O<sub>2</sub> in said respiratory system.
4. (previously amended) The method of claim 1, wherein said lung condition comprises infection with: a) bacteria; b) fungus; or c) virus.
5. (currently amended) The method of claim 1, said method further comprising administering:
  - a) a peroxidase; and/or
  - b) an effective amount of thiocyanate.
6. (previously amended) The method of claim 1, wherein said administering is in combination with a treatment for a lung condition, a lung infection, or cystic fibrosis.
7. (previously amended) The method of claim 6, wherein said treatment comprises: a) administering an antibiotic, anti-fungal or antiviral; b) administering a depolymerase; or c) an airway clearance technique or physical therapy.
8. (previously amended) The method of claim 7, wherein:
  - a) said polymerase is a DNase; or
  - b) said treatment comprises one or more of a breathing exercise, postural drainage, chest percussion, vibration, or assisted coughing.

9. (original) The method of claim 1, wherein said  $H_2O_2$  is:
- a) at a concentration between  $10^{-7}$  M and  $10^{-4}$  M in the lung fluid; or
  - b) administered between once in a week to hourly.
10. (currently amended) A method of treating a lung ~~infection~~ in a mammal, said method comprising administering to the respiratory system of said mammal an effective amount of  $H_2O_2$
11. (currently amended) The method of claim 10, wherein said mammal is a primate and said administering is by:
- a) inhalation
  - b) a formulation which produces  $H_2O_2$  in said respiratory system; or
  - c) in combination with a peroxidase or an effective amount of thiocyanate.
12. (cancelled) The method of claim 10, wherein said administering is a formulation which produces  $H_2O_2$  in said respiratory system.
13. (cancelled) The method of claim 10, wherein said lung infection comprises a:
- a) bacterium, including Staphylococcus aureus, Pseudomonas aeruginosa, or Burkholderia cepacia;
  - b) fungus; or
  - c) virus.
14. (cancelled) The method of claim 10, wherein said administering is in combination with: a) peroxidase; or b) thiocyanate.
15. (cancelled) The method of claim 10, wherein said administering is in combination with a treatment for a lung condition, including a lung infection or cystic fibrosis.
16. (cancelled) The method of claim 15, wherein said additional treatment comprises administering an: a) antibiotic; b) anti-fungal; or c) anti-viral.

17. (cancelled) The method of claim 15, wherein said additional treatment comprises:
- a) administering an enzyme, including a depolymerase; or
  - b) an airway clearance technique or physical therapy, including breathing exercises, postural drainage, chest percussion, vibration, or assisted coughing.
18. (previously amended) The method of claim 10, wherein said H<sub>2</sub>O<sub>2</sub> is:
- a) at a concentration between 10<sup>-7</sup> M and 10<sup>-4</sup> M in the lung fluid; or
  - b) administered between once in a week to hourly.
19. (presently amended) An inhaler comprising:
- a) aerosolized hydrogen peroxide;
  - b) a peroxidase; or
  - c) thiocyanate.
20. (Cancelled) The inhaler of claim 19, further comprising an antibiotic, an anti-fungal, or an anti-viral.
21. (previously presented) The method of Claim 4 wherein said bacteria comprises Staphylococcus aureus, Pseudomonas aeruginosa, or Burkholderia cepacia.
22. (previously presented) The method of Claim 11, wherein:
- a) said lung infection comprises bacteria;
  - b) said administering is in combination with an additional treatment for cystic fibrosis;
  - c) said administering is in combination with administering a depolymerase;
  - d) said administering is in combination with an airway clearance technique or physical therapy; or
  - e) said administering is in combination with at least one of a breathing exercise, postural drainage, chest percussion, vibration, or assisted coughing.

23. (previously presented) The method of Claim 11, wherein:
- a) said administering is in combination with administering thiocyanate;
  - b) said administering is in combination with administering an antibiotic; or
  - c) said treating prevents or decreases progression of said lung infection.
24. (previously presented) The method of Claim 10, wherein:
- a) said lung infection comprises bacteria, fungus, or virus; or
  - b) said administering is in combination with an additional treatment for a lung condition, lung infection, or cystic fibrosis.
25. (previously presented) The method of Claim 24, wherein:
- a) said bacteria comprises *Staphylococcus aureus*, *Pseudomonas aeruginosa*, or *Burkholderia cepacia*; or
  - b) said administering is in combination with thiocyanate.
26. (previously presented) The method of Claim 10, wherein said treating prevents or decreases progression of said lung infection.
27. (previously presented) The inhaler of Claim 19, which:
- a) administers an amount of hydrogen peroxide to the respiratory system of a mammal effective to decrease microbial load;
  - b) administers hydrogen peroxide in an amount between  $10^{-7}$  M and  $10^{-4}$  M in the lung fluid; or
  - c) further comprises an antibiotic, an anti-fungal, or an anti-viral.
28. (previously presented) The inhaler of Claim 19, comprising:
- a) hydrogen peroxide;
  - b) thiocyanate; or
  - c) hydrogen peroxide and thiocyanate.